UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

27569

7590

08/24/2009

PAUL AND PAUL 2000 MARKET STREET SUITE 2900 PHILADELPHIA, PA 19103 EXAMINER

WINSTON, RANDALL O

ART UNIT PAPER NUMBER

1655

DATE MAILED: 08/24/2009

018

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019 240	05/13/2002	Jorg Peter Schur	2006-503/VON KREIS	1893

TITLE OF INVENTION: METHOD FOR DISINFECTING THE AIR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$0	\$0	\$755	11/24/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

#### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

maintenance fee notifica	ttions.	ng the Patent, advance of herwise in Block 1, by ( lock 1 for any change of address)	No Fe	te: A certificate of	mailing	g can only be used for	correspondence address as ate "FEE ADDRESS" for domestic mailings of the r any other accompanying
	paj ha	pers. Each additiona we its own certificate	d paper e of ma	, such as an assignmen lling or transmission.	t or formal drawing, must		
PAUL AND P 2000 MARKET SUITE 2900	STREET	I h Ste ade tra	Certificate of Mailing or Transmission  I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.				
PHILADELPHI	A, PA 19103						(Depositor's name)
			_				(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	R	АТТО	RNEY DOCKET NO.	CONFIRMATION NO.
10/019,240	05/13/2002		Jorg Peter Schur		2006	-503/VON KREIS 018	1893
TITLE OF INVENTION	: METHOD FOR DISIN	NFECTING THE AIR				010	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$0	\$0		\$755	11/24/2009
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
WINSTON, I	RANDALL O	1655	424-045000				
"Fee Address" ind PTO/SB/47; Rev 03-(Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Un	ND RESIDENCE DATA less an assignee is ident th in 37 CFR 3.11. Com	" Indication form ned. Use of a Customer A TO BE PRINTED ON iffied below, no assignee	(1) the names of up to agents OR, alternated (2) the name of a sing registered attorney or 2 registered patent att listed, no name will but THE PATENT (print or totata will appear on the OT a substitute for filing at (B) RESIDENCE: (CIT	ively, gle firm (having as a agent) and the nam orneys or agents. If e printed.  //pe) patent. If an assign assignment.	n membres of uno nam	p to ge is 3dentified below, the do	cument has been filed for
4a. The following fee(s)  Issue Fee Publication Fee (N	are submitted:  No small entity discount p	permitted)	b. Payment of Fee(s): (Ple A check is enclosed. Payment by credit ca	ease first reapply a	ny prev	riously paid issue fee s	
5. Change in Entity Sta	# of Copies		overpayment, to Dep	osit Account Numb	er	required fee(s), any def (enclose an	extra copy of this form).
_ 。 .	ns SMALL ENTITY statu	· · · · · · · · · · · · · · · · · · ·	☐ b. Applicant is no lo	nger claiming SMA	LL EN	ΓΙΤΥ status. See 37 CF	R 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	nd Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	ed from anyone other than k Office.	the applicant; a reg	istered	attorney or agent; or the	e assignee or other party in
Authorized Signature				Date			
Typed or printed name				-			
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	itiality is governed by 35 dapplication form to the ions for reducing this bu /irginia 22313-1450. DC	OFR 1.311. The information of U.S.C. 122 and 37 CFR and U.S.C. 125 and 37 CFR are USPTO. Time will varied in should be sent to the DONOT SEND FEES OR	on is required to obtain or 1.14. This collection is e y depending upon the ind ie Chief Information Offic COMPLETED FORMS	retain a benefit by t stimated to take 12 tvidual case. Any co cer, U.S. Patent and TO THIS ADDRESS	the pub minutes omment Traden S. SENI	lic which is to file (and s to complete, including s on the amount of tim hark Office, U.S. Depa D TO: Commissioner for the commissione	by the USPTO to process) g gathering, preparing, and the you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

OMB 0651-0033

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/019,240	05/13/2002	Jorg Peter Schur	2006-503/VON KREIS 1893		
27569 7590 08/24/2009			EXAMINER		
PAUL AND PAU	JL	WINSTON, RANDALL O			
2000 MARKET ST	TREET	ART UNIT PAPER NUMBER			
SUITE 2900 PHILADELPHIA,	PA 19103		1655 DATE MAILED: 08/24/200	0	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 404 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 404 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)				
	10/019,240	SCHUR, JORG PETER				
Notice of Allowability	Examiner	Art Unit				
	Randall Winston	1655				
The MAILING DATE of this communication appea.  All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313  1. This communication is responsive to the communication file.	(OR REMAINS) CLOSED i or other appropriate comm <b>GHTS</b> . This application is and MPEP 1308.	n this application. If not included unication will be mailed in due course. <b>T</b> l				
2. ☑ The allowed claim(s) is/are <u>32-52</u> .						
3.  Acknowledgment is made of a claim for foreign priority ur  a)  All b)  Some* c)  None of the:  1.  Certified copies of the priority documents have 2.  Certified copies of the priority documents have 3.  Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM	been received. been received in Application cuments have been receive	on No d in this national stage application from t				
<ul> <li>THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.</li> <li>4. ☐ A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give</li> <li>5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must (a) ☐ including changes required by the Notice of Draftspers</li> <li>1) ☐ hereto or 2) ☐ to Paper No./Mail Date</li> </ul>	itted. Note the attached EX es reason(s) why the oath o et be submitted. on's Patent Drawing Revie	r declaration is deficient.	F			
<ul> <li>(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date</li> <li>Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).</li> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ul>						
<ul> <li>Attachment(s)</li> <li>1. ☐ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☐ Information Disclosure Statements (PTO/SB/08),</li></ul>	6.	oformal Patent Application formal Patent Application fummary (PTO-413), /Mail Date Amendment/Comment Statement of Reasons for Allowance				

Art Unit: 1655

### **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of issue of fee.

Authorization for this amendment was given by Johns S. Child on June 3, 2009.

# **IN THE CLAIMS**

Claims 1-6, 8-13, 15-19 and 22-31 submitted on 08/05/2008 have been canceled.

The following new claims, claims 32-52, have been added:

- -
- 32. A method for the disinfection of air, comprising the distributing or atomizing of an antimicrobial composition, wherein a concentration of the antimicrobial composition of from 0.001 to 1 ml per m³ of air is adjusted by said distributing or atomizing of said antimicrobial composition, and/or exchanging air systems are adjusted to achieve a dosage of from 0.001 to 1 ml per m³ of air per hour, and/or a permanent concentration of from 5 to 10 ppb of the antimicrobial composition is achieved, wherein said antimicrobial composition is free from ethanol and isopropanol and comprises
  - (a) at least 75% by weight of propylene glycol; and
  - (b) 0.01 to 25% by weight of tannic acid.

Art Unit: 1655

33. The method according to claim 32, wherein said antimicrobial composition further comprises benzyl alcohol.

- 34. The method according to claim 33, wherein said antimicrobial composition comprises from 0.1 to 10% by weight benzyl alcohol.
- 35. The method according to claim 32, wherein the antimicrobial composition further comprises lactic acid.
- 36. The method according to claim 33, wherein said antimicrobial composition comprises form 0.1 to 10% by weight of benzyl alcohol and from 90 to 99.9% by weight of propylene glycol.
- 37. The method according to claim 32, wherein said antimicrobial composition further comprises GRAS flavoring agents selected from (c) phenols, (d) esters, (e) terpenes, (f) acetals, (g) aldehydes, and (h) essential oils.
- 38. The method according to claim 37, wherein said antimicrobial composition contains from 0.001 to 25% by weight of said additional GRAS flavoring agents (c) to (h).

Art Unit: 1655

39. The method according to claim 37, wherein said additional GRAS flavoring agents are phenols (c) and/or essential oils (h).

- 40. The method according to claim 32, wherein said antimicrobial composition does not contain any derivatives of said GRAS flavoring agents.
- 41. The method according to claim 33, wherein said antimicrobial composition comprises from 0.1 to 20% by weight of benzyl alcohol and from 0.01 to 10% by weight of tannic acid.
- 42. The method according to claim 36, wherein the antimicrobial composition further comprises water and water content of said antimicrobial composition is less than 35 % by weight.
- 43. The method according to claim 32, wherein said composition further comprises emulsifiers, stabilizers, antioxidants, preservatives, solvents, and/or carrier materials.
- 44. The method according to claim 32, wherein said atomizing of said antimicrobial composition effected by a two-fluid nozzle system, evaporation system or a bubbler installation for the air, or in a special design for packaging.

Application/Control Number: 10/019,240

Art Unit: 1655

45. The method according to claim 32, wherein the concentration of said antimicrobial composition from 0.01 to 0.1 ml per m³ of air is adjusted by said distributing or atomizing of said antimicrobial composition, and/or exchanging air systems are adjusted to achieve a dosage of from 0.01 to 0.1 ml per m³ of air per hour.

Page 5

- 46. A method for the disinfection of air to reduce the concentration of germs selected from the group consisting of at least one of gram-positive bacteria, gram-negative bacteria, molds, spore-formers and viruses, said method comprising the distributing or atomizing of an antimicrobial composition, wherein a concentration of the antimicrobial composition of from 0.001 to 1 ml per m³ of air is adjusted by said distributing or atomizing of said antimicrobial composition, and/or exchanging air systems are adjusted to achieve a dosage of from 0.001 to 1 ml per m³ of air per hour, and/or a permanent concentration of from 5 to 10 ppb of the antimicrobial composition is achieved, wherein said antimicrobial composition is free from ethanol and isopropanol and comprises
  - (a) at least 75% by weight of propylene glycol; and
  - (b) 0.01 to 25% by weight of tannic acid.
- 47. A method for the disinfection of air to reduce the concentration of germs selected from the group consisting of at least one of *bactillus subtilis*, *pseudomona fluorescens*, *staphylococcus aureus*, *aspergillus niger* and *hepatitis B*, said method comprising the distributing or atomizing of an antimicrobial composition, wherein a concentration of the antimicrobial composition of from 0.001 to 1 ml per m³ of air is adjusted by said

Art Unit: 1655

distributing or atomizing of said antimicrobial composition, and/or exchanging air systems are adjusted to achieve a dosage of from 0.001 to 1 ml per m³ of air per hour, and/or a permanent concentration of from 5 to 10 ppb of the antimicrobial composition is achieved, wherein said antimicrobial composition is free from ethanol and isopropanol and comprises

- (a) at least 75% by weight of propylene glycol; and
- (b) 0.01 to 25% by weight of tannic acid.
- 48. A method for the disinfection of air to reduce the concentration of *bacillus* anthracis, said method comprising the distributing or atomizing of an antimicrobial composition, wherein a concentration of the antimicrobial composition of from 0.001 to 1 ml per m³ of air is adjusted by said distributing or atomizing of said antimicrobial composition, and/or exchanging air systems are adjusted to achieve a dosage of from 0.001 to 1 ml per m³ of air per hour, and/or a permanent concentration of from 5 to 10 ppb of the antimicrobial composition is achieved, wherein said antimicrobial composition is free from ethanol and isopropanol and comprises
  - (a) at least 75% by weight of propylene glycol; and
  - (b) 0.01 to 25% by weight of tannic acid.
- 49. The method according to claim 47, wherein said antimicrobial composition further comprises benzyl alcohol.

Art Unit: 1655

50. The method according to claim 49, wherein the alcohol constituent of said

antimicrobial composition comprises from 1% to 10% by weight of benzyl alcohol.

51. The method according to claim 47, wherein said antimicrobial composition further

comprises lactic acid.

52. The method according to claim 46, wherein said antimicrobial composition further

comprises lactic acid.

--

Claims 32-52 are allowed.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Randall Winston whose telephone number is 571-272-

0972. The examiner can normally be reached on 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RW

/Christopher R. Tate/ Primary Examiner, Art Unit 1655